

**APRS goes to  
the**

*Sydney Games*



**Darryl Smith, VK2TDS**





Sydney 2000



GAMES OF THE XXVII<sup>e</sup> OLYMPIAD JEUX DE LA XXVII<sup>e</sup> OLYMPIADE



**HBb**

**T4**



**DARRYL SMITH**

PRODUCTION  
SOBO

**S**

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**ATV**

**AT**

**CY**

**TRC**

**IBC**

**MPC**

OLYMPIC GAMES IDENTITY AND ACCREDITATION CARD

GAMES OF THE XXVII<sup>e</sup> OLYMPIAD JEUX DE LA XXVII<sup>e</sup> OLYMPIADE

**S**

SYDNEY OLYMPIC PARK PRECINCT

**ATV**

ALL TRAINING VENUES

**AT**

ATHLETICS COMPETITION VENUES  
SITES DE COMP. D'ATHLETISME

**CY**

CYCLING COMPETITION VENUES  
SITES DE COMP. DE CYCLISME

**TRC**

TRIATHLON COURSE

**IBC**

INTERNATIONAL BROADCAST CENTRE  
CENTRE INTER. RADIODIFFUSION E

**MPC**

MAIN PRESS CENTRE  
CENTRE PRINCIPALE DE PRESSE

**4**

NON RIGHTS HOLDING MEDIA AREAS  
SECT. DIFF. NON DETENT. DROITS

**5**

RIGHTS HOLDING BROADCAST AREAS  
SECT. DIFF. DETENTEURS DROITS



ADMIN & OPERATIONAL AREAS  
SECTEUR OPERAT. & SECTEUR ADM.



**IBM.**



CARTE D'IDENTITE ET D'ACCREDITATION OLYMPIQUE

**4 5**

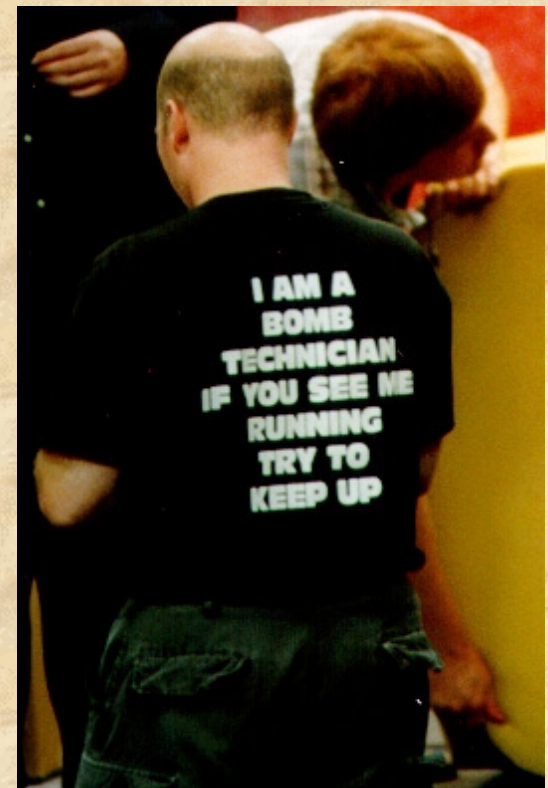
**DARRYL SMITH**

PRODUCTION  
SOBO

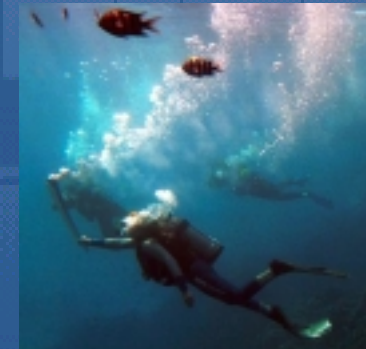


# Sydney 2000

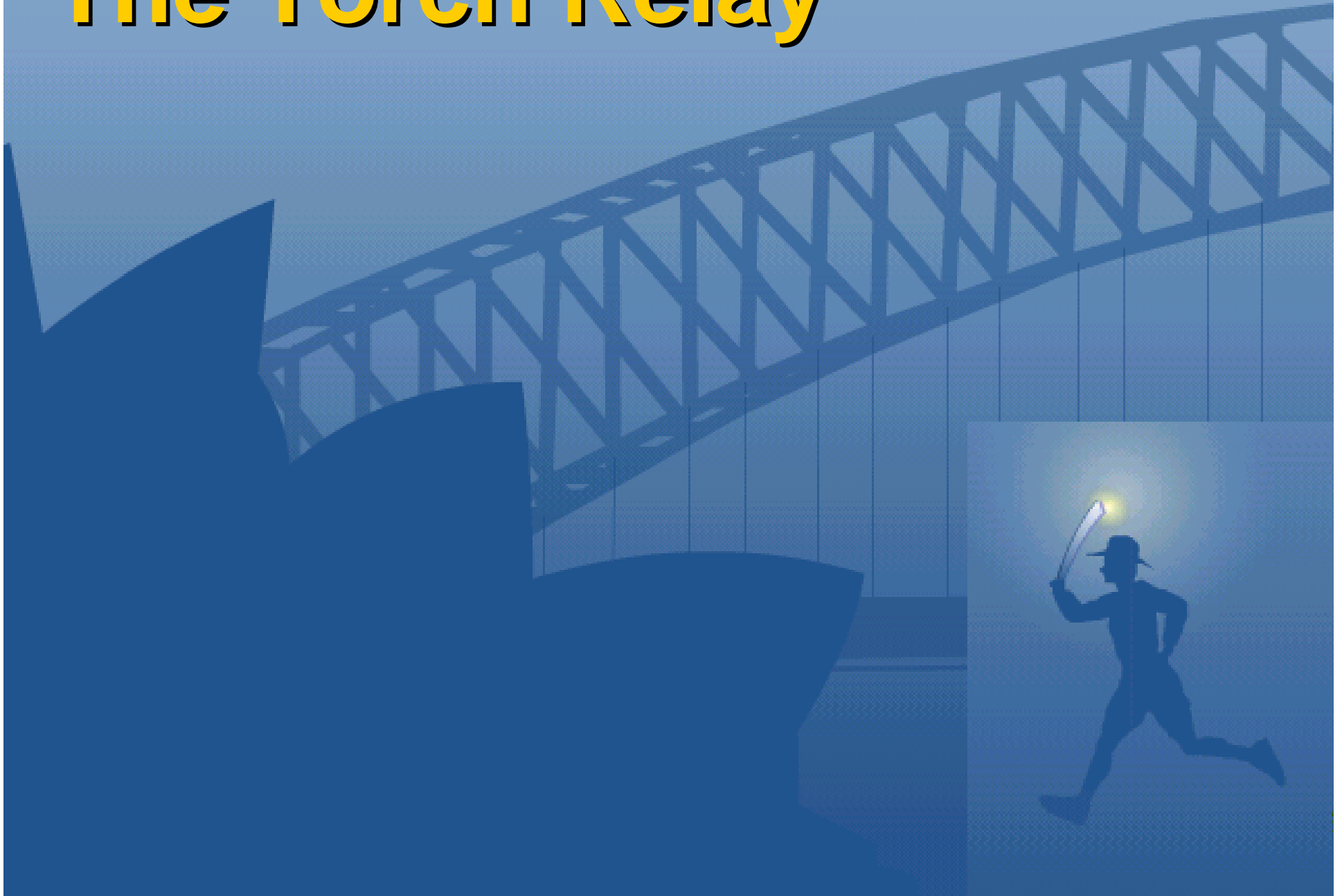
This presentation describes the use of GPS in the 2000 Sydney Olympics. It is intended that this presentation be updated following The Games with actual photos.



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# The Torch Relay







# Sydney 2000



- ✓ SOCOG is the Sydney Organising Committee for the Olympic Games. They have created SOBO - the Sydney Olympic Broadcasting Organisation.
- ✓ SOBO has contracted many organisations to provide specialist services. Winemiller Inc of Carlisle, Pa are providing RF based video coverage of The Games.

# RF Video

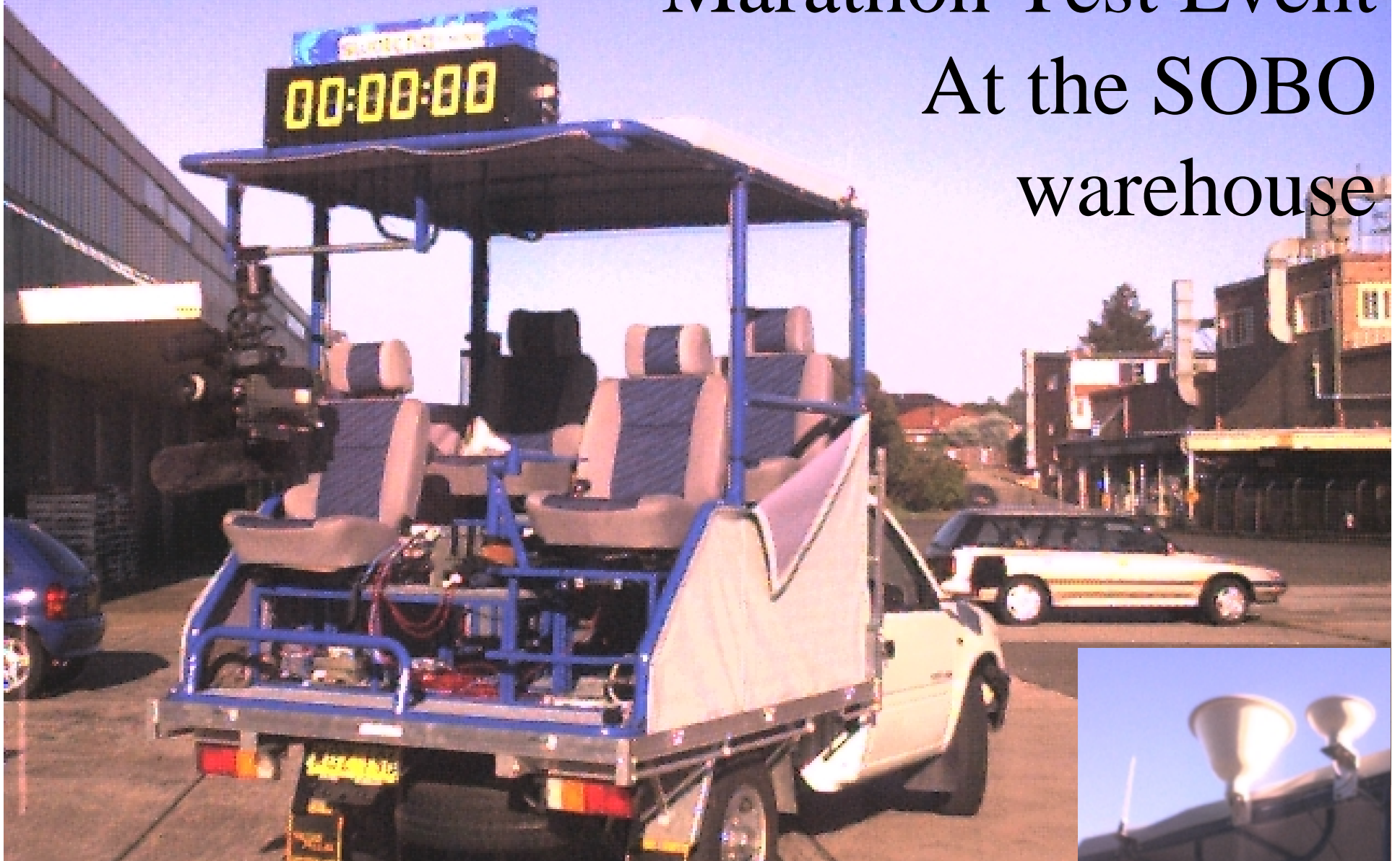


- ✓ Winemiller, Inc. will be providing all the RF Video links for the games.
- ✓ These links connect to Fibre Optic cable at various base stations for transfer to the International Broadcast Center (IBC)
- ✓ The links will come from Helicopters, Fixed Wing Planes and road based vehicles.

# View from Base Station to Homebush Bay



# Race Lead Vehicle - During the Marathon Test Event At the SOBO warehouse



# Sydney Marathon Test

- ✓ The MARATHON test was relatively successful.
- ✓ We had GPS failures due to RF interference (3f+20 MHz)

This is a RACK of SDI (Digital Video) links to the fibre transit room at the International Broadcast Centre (IBC)





# Viewing Room of Test Marathon

- ✓ Notice the map in the center of the screen -  
That is my work

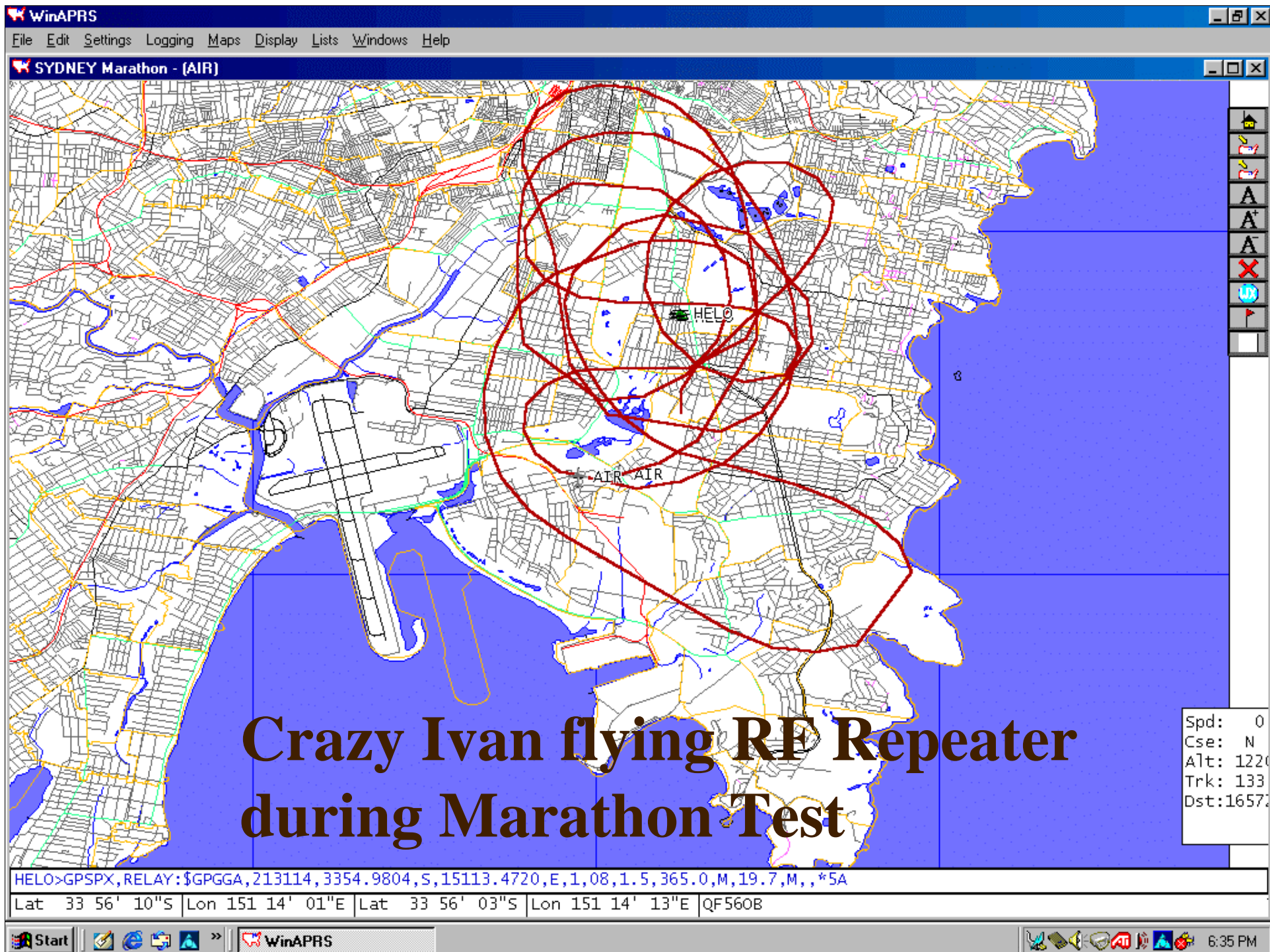




# Marathon Test Event

- ✓ Three Base Stations sites
- ✓ 1 Fixed Wing and 1 Helicopter
- ✓ 1 Camera Truck with 2 uplinks
- ✓ 9 US Employees & 1 Australian
- ✓ 27 Boxes flown in from the USA

**All so that most of the technical problems could be ironed out before the games. After all lack of video or sound for the marathon would be a huge embarrassment to Australia**





# Specialist Software

✓ During events, the most commonly asked question, after asking where a particular station is, is to ask how far away a station is from another one.

The screenshot shows a software window titled 'Form1' with a table of station data. The table has columns for station names (WCI-1, HELO, AIR, LEAD-1) and rows for distances and bearings. The data is as follows:

	WCI-1	HELO	AIR	LEAD-1
WCI-1	0 245	9.8 KM 245	23.6 KM 115	2.5 KM 245
HELO	9.8 KM 57	01:23:18 57	4.9 KM 57	7.6 KM 57
AIR	23.6 KM 303	17.2 KM 303	02:36:49 303	22.5 KM 303
LEAD-1	2.5 KM 57			00:00:02

Below the table, there is a 'TIME' label with a text box containing '04:45:50', a 'WCI-1' label with a text box containing 'WCI-1', and three buttons labeled 'Command1', 'Command2', and 'Command3'.

I am writing software that will plug into WinAPRS and provide a spreadsheet of distances and bearings

# Frequencies

- ✓ Frequencies for use during The Games are confidential.
- ✓ I do not even know the exact frequencies in use
- ✓ I do know that APRS will not be used on HAM bands.
- ✓ And if you do decide to go looking, please do not interfere with the signals.

Where is KENWOOD Australia?





# HOME BUSH

